TRAFFIC COMMISSION REPORT
November 18, 2010

Item VG

VERDUGO BIKE LANE AND HSIP GRANT APPLICATION

ISSUE:

At the October meeting, staff requested that the Traffic Commission support two proposed Highway Safety Improvement Program (HSIP) grant applications: The Verdugo Bike Lane extension and upgrading guardrails around the City. The Traffic Commission requested the Verdugo Bike Lane extension issue be brought back after the Council voted on this item on November 2nd.

BACKGROUND:

On November 2, 2010 City Council received a staff presentation on the existing bike lane project on Verdugo between Hollywood Way and Olive. Council decided to proceed with staff's recommendations as outlined in the staff report (see Attachment 1), and for staff to return to Council in 6 months with an update on the street's operation after applying the remaining project funds toward the additional recommended improvements, as well as pursue HSIP grant opportunities for the recommended improvements.

DISCUSSION:

At the October meeting, the Traffic Commission received a staff report on Highway Safety Improvement Program Grant for two proposed projects (see Attachment 2). As part of the Verdugo Bike Lane extension project, staff recommends to extend the bike lane from Olive Avenue to Victory Blvd, and from Hollywood Way to westerly city limits.

CONCLUSIONS:

The above projects are needed to improve safety in Burbank, and they are the type of projects that have been funded by Caltrans in past grant cycles. Staff believes that these projects have a good chance of receiving funding from Caltrans.

RECOMMENDATIONS:

Staff requests Traffic Commission support for these two projects and requests endorsement letters from the Traffic Commission to Caltrans in support of the applications.

ATTACHMENTS:

1. Attachment 1- Nov. 2. 2010, City Council Agenda Report on Verdugo Bike Lane
2. Attachment 2- October 2010, Traffic Commission Item VE (HSIP) report

city of burbank
community development department

memorandum

DATE: November 2, 2010

TO: Michael S. Flad, City Manager

FROM: Greg Herrmann, Community Development Director
Bonnie Teaford, Public Works Director
by David L. Kriske, Principal Planner
Ken Johnson, Traffic Engineer

SUBJECT: **Verdugo Avenue Roadway Striping Reconfiguration Six-Month Review**

PURPOSE:

In December 2009, City Council directed staff to modify roadway striping on Verdugo Avenue to add a continuous two-way center turn lane, reduce the number of through travel lanes from four to two, and add bicycle lanes as identified on the City's Bicycle Master Plan. The purpose of this report is to provide an update on the vehicle and non-motorized operation of Verdugo Avenue since implementation of the reconfiguration in late March 2010.

BACKGROUND:

On December 15, 2009, the City Council directed staff to implement a reconfiguration of Verdugo Avenue between Olive Avenue and Hollywood Way. The reconfiguration reduced the number of through lanes from four to two, and converted the remaining roadway space to provide a continuous center turn lane and bicycle lanes. The purpose of this improvement was to improve non-motorized travel for bicycle and pedestrians along and across the corridor, to calm and potentially slow vehicle travel, and to improve safety on this predominately residential street. Verdugo was chosen for this improvement because of the lower vehicle daily traffic counts relative to other secondary arterials, its residential character, and because it serves a number of land uses that would be attractive to bicycles and pedestrians including schools, parks, libraries, and neighborhood retail centers. Also, the reconfiguration of Verdugo between Olive and Hollywood Way matches street cross sections to the east and west of the corridor. The reconfiguration of Verdugo Avenue was requested by the Sustainable Burbank Task Force and is a Top Priority Project in the City's Bicycle Master Plan.

While staff cited a number of improvements to transportation along the Verdugo corridor when recommending the improvement to the Council, staff also identified potential tradeoffs to vehicle circulation under the reconfiguration. In particular, while volumes along mid-block portions of the corridor were expected to easily handle current traffic volumes, staff did identify the possibility for increased delay at intersections with Buena Vista Street and Hollywood Way due

to the reduced through lanes at these locations. Intersection restriping and minor traffic signal improvements were recommended at Hollywood Way to address this delay. The Initial Study and Negative Declaration prepared for the project suggested that this delay was less than significant. Staff also reported that increases in delay at these locations could push traffic to alternative streets; however, travel demand modeling analysis showed that this traffic shift would be minor and less than significant. Given the potential improvements to non-motorized travel along the corridor and the ability to mitigate any potential impacts to vehicle circulation and delay, the Council voted to implement the Verdugo Avenue reconfiguration on a trial basis and directed staff to monitor roadway operations. Staff was asked to return to the Council with an update on the project after six months of operations. The remainder of this report describes staff's findings during the six-month operation of Verdugo Avenue.

ANALYSIS:

Project Implementation and Data Collection Efforts

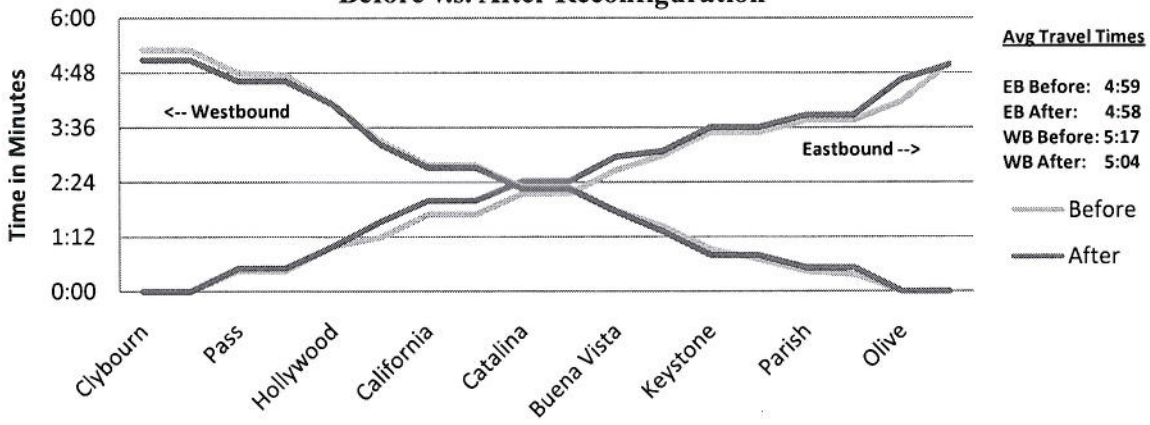
In late March 2010, the City's roadway striping contractor restriped the entire corridor as described above between Olive Avenue and Hollywood Way. In addition to the restriping, staff modified the traffic signal at Verdugo Avenue and Hollywood Way to provide protected left turn phasing in the eastbound direction and to install a second left-turn lane at this intersection approach. Later throughout April 2010, the City's signal crews modified all minor-street signalized intersections to change operations from fixed-time to semi-actuated which allows for more green time to Verdugo Avenue at these minor intersections. With these improvements in place, the City's traffic signal operations staff then monitored Verdugo's operation, while Planning and Transportation Division staff conducted intersection and mid-block traffic counts to assess traffic volumes and intersection performance. As initial traffic signal infrastructure was installed, staff observed significant congestion at Hollywood Way and Buena Vista Street, as well as inefficient operations throughout the rest of the corridor. To address this, traffic signal operations staff adjusted the corridor's signal timing to better fit the new lane configuration. With these signal timing changes, operations on the corridor improved substantially along the corridor, and congestion at the major intersections also improved.

With the improvements in place and optimized, staff analyzed traffic data collected before and after the improvement to assess operations of motor vehicles. Before-and-after data collected to assess operations included mid-block traffic tube counts measured at four locations, intersection turn-movement counts taken at AM and PM peak periods, and travel-time surveys taken during the PM peak hour. In addition, traffic counts were taken on Clark Avenue (a nearby parallel collector street) to assess if the Verdugo reconfiguration was causing significant traffic shifts to collector streets. Traffic count data was collected before the reconfiguration (mostly from historical counts taken in 2006) and twice after the reconfiguration was implemented (May 2010 and September 2010). Travel surveys were conducted once before (March 2010) and once after (September 2010) the reconfiguration. Also, the City's traffic cameras were used to count bicycle traffic using the new bicycle lanes in May 2010 and September 2010. All of this data was then used to assess before-and-after conditions along Verdugo Avenue.

Traffic Operations

Staff discovered two unexpected results of the Verdugo Avenue reconfiguration when analyzing this before-and-after data. First, comparing PM peak period travel time measurements showed that overall corridor travel times on Verdugo from Olive to the western city limits were unchanged with the restriping. Chart 1 (with further details shown on Exhibit A) shows that travel times for vehicles remained consistently about five minutes through the corridor, and average vehicle speed remained about 22 miles per hour. Second, daily volumes along Verdugo at the eastern and western ends of the reconfigured street segment actually increased slightly at the eastern end of the corridor despite the reduction in through travel lanes. Staff had actually expected a small amount of corridor traffic to be shifted to other major streets as delay at major intersections occurred. Instead, data suggests that despite the reduction in through lanes, traffic has remained basically constant in the corridor even with the reconfiguration, and has increased between the time the reconfiguration was first installed (May 2010) and once the reconfiguration was in place for a number of months (September 2010). It should be noted that the increase in traffic volumes between May 2010 and September 2010 at the west end of the corridor is due to the re-opening of the Pass Avenue Bridge over State Route 134 in the Media District which connects to Verdugo Avenue. Traffic increases at the east end of the corridor near Olive Avenue are possibly due to the opening of a Fresh and Easy Market. Clark Avenue counts show a slight increase in traffic, but it is unclear whether or not this is associated with the Verdugo Avenue reconfiguration since traffic volumes on Verdugo increased slightly as well.

Chart 1 - Verdugo Avenue Average PM Peak Hour Travel Time Before v.s. After Reconfiguration



Staff believes that the reason travel times in the corridor have remained consistent despite a reduction in through lanes and a slight increase in daily volumes is because away from the major intersections, reducing through lanes and adding a center turn lane on streets with approximately 15,000 and 18,000 cars does not appreciably reduce roadway capacity. The data collected for Verdugo to support this conclusion is consistent with case studies of four-to-three conversions performed in other cities. Four-lane roadways without center turn lanes are an inefficient use of roadway space because the inside through lane must be used by left-turning vehicles and through vehicles. Reducing two inefficient through lanes and replacing them with a dedicated turn lane achieves a similar level of roadway capacity.

Table 1 – Daily Traffic Volumes

Verdugo:	Before	5/13/2010	9/30/2010
West of Hollywood	17,699	15,473	18,012
West of California	14,672	14,938	15,797
West of Buena Vista	15,200	15,933	15,878
West of Olive	12,697	14,394	14,063
Clark:			
East of Hollywood	4,262	4,084	4,498
East of Buena Vista	3,605	4,526	4,449

At the major signalized intersections along Verdugo Avenue, intersection turn-movement data collected during peak hours before and after the reconfiguration shows that intersection delays at these locations have increased with the reconfiguration. A Level of Service (LOS) calculation is used to rate intersection operations on an A through F scale (A being best) and compares it to the City's traffic impact threshold of LOS D. LOS derived from these traffic counts shows that congestion has increased slightly at each intersection. For the Hollywood Way intersection, this LOS increase is in spite of the addition of a second left turn lane to the eastbound approach of Hollywood Way. LOS is higher but remains within the City's acceptable LOS D standard at Buena Vista Street but has exceeded the standard (LOS E) at Hollywood Way. Operationally, staff's ongoing monitoring of operations (in real time using traffic cameras) shows that traffic queues generally clear both intersections within a single traffic signal cycle even at the peak periods.

Table 2 - Major Intersection Level of Service

	Before Reconfiguration				After Reconfig. (5/13/2010)				After Reconfiguration (9/30/2010)					
	Morning		Evening		Morning		Evening		Morning		Afternoon		Evening	
	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
Keystone					0.470	A	0.516	A	0.447	A			0.557	A
Buena Vista	0.672	B	0.765	C	0.734	C	0.849	D	0.712	C	0.826	D	0.898	D
California					0.449	A	0.540	A	0.507	A			0.541	A
Hollywood	0.839	D	0.811	D	0.735	C	0.882	D	0.858	D			**0.926**	E

School Traffic

In addition to peak hour roadway performance, Verdugo Avenue is unique to most other streets in Burbank in that it serves John Burroughs High School, which generates morning and mid-day congestion associated with school arrival and departures. Congestion on streets serving both high schools in Burbank is congested for very brief (15 minutes) periods during these times as parents pick up and drop off students. The Verdugo Avenue reconfiguration does not relieve vehicle congestion related to school traffic and thus congestion around Burroughs High School continues to occur during these intervals. Operationally, the Verdugo Avenue lanes have eased vehicle congestion caused by left-turn movements leading to and from Verdugo Avenue and side streets like Keystone and Parish. However, right turn movements onto these same streets causes

similar congestion to through traffic as cars queue to make turns onto these narrow side streets. The net effect of the reconfiguration on these movements is roughly the same, as congestion continues to occur during peak school traffic periods. If Council directs staff to maintain the Verdugo Avenue reconfiguration, minor striping modification to the roadway could make right-turn lanes more explicit to drivers to help improve these movements. It should be noted that returning Verdugo Avenue to its previous configuration would not improve school congestion near John Burroughs; similar congestion occurs on Glenoaks Boulevard which serves Burbank High School and Glenoaks has significantly more capacity than Verdugo Avenue under both striping configurations. Due to the nature of school congestion, it is nearly impossible to provide enough peak period capacity to serve the tremendous concentration of vehicles serving high schools. The Verdugo Avenue reconfiguration offers an alternative way for high school students to travel to school for those that wish to avoid vehicle congestion by providing better bicycle and pedestrian facilities on the street.

Bicycle Usage

In addition to vehicle operations, staff also sought to collect data and observations on bicyclists using Verdugo Avenue. Staff conducted a 10-hour bicycle count on Verdugo Avenue on a typical weekday in May and September 2010 to assess usage of the new bicycle lanes. The counts revealed that about 200 bicycles per day are using the Verdugo Avenue bicycle lanes. Compared with typical arterial streets in the Los Angeles area, this is a high utilization for an on-street bicycle facility and suggests that Verdugo Avenue is well-used as a bicycle route as compared to other streets. Compared to the accompanying vehicle traffic served by Verdugo Avenue during the same time period, approximately 1.5 to 2 percent of traffic on Verdugo is bicycle traffic. This percentage is higher than the typical ratio of cars to bicycles found in the Los Angeles area of less than one percent. Through the Bicycle Master Plan, the Council has set a five percent bicycle mode split goal in Burbank upon buildout of the City's bicycle network. In addition, qualitative observation of bicycle riders on Verdugo (observed during travel time surveys as well as monitoring traffic cameras) suggests that the facility is used by a broad cross section of users, from casual riders to commuters and even children and families. The latter group of riders suggests that the Verdugo Avenue bicycle lanes attracts more cautious or novice riders because they feel safer to use Verdugo with the new bicycle lanes. Attracting novice riders is key to improving overall bicycle usage by residents and employees who may wish to use cycling for shorter commute and utilitarian trips.

Table 3 - Non-motorized Traffic Counts
Verdugo Avenue East of Hollywood Way

	5/13/2010	9/14/2010
Bikes	212	186
Scooter	16	3
Stroller	13	6
Skateboard	3	1
Rollerskates	1	1
Wheelchair	1	2
Total	246	199

Citizen Feedback since Implementation

Since the reconfiguration of Verdugo Avenue, staff has received substantial feedback from adjacent residents and other roadway users. Initially, there was significant criticism over the amount of increased delay and congestion at the major street intersections. Most of this criticism was the result of the early, inefficient signal operation that caused long queues at Hollywood Way and Buena Vista Street. This criticism has subsided as the street operations have improved. Other criticism has focused on the increased difficulty for vehicles to cross Verdugo or to make left turns at non-signalized intersections. While the reconfiguration has made these non-signalized intersections safer for vehicles and pedestrians to cross because there are less travel lanes to negotiate, it has reduced the number of traffic "gaps" that vehicles use to cross. With the reconfiguration, vehicles are more likely to make right turns rather than crossing movements. This also has a side effect of reducing vehicle "cut through" traffic between north and south, which is a positive benefit of the reconfiguration. Nonetheless, there have been some persistent complaints that crossing Verdugo at non-signalized intersections takes longer and is an inconvenience for drivers.

There have been complaints regarding school congestion persisting or worsening. As stated above, the Verdugo reconfiguration has improved left-turn movements near schools at the detriment of right turn movements. Overall, school congestion persists at school locations with the reconfiguration. However, the bicycle lanes provide opportunity to increase and improve non-motorized access to Burroughs High School which is the only effective way to mitigate the short, high volume crush traffic loads around schools.

Additionally, the City Council received a 300-plus signature petition in October 2010 requesting the removal of the Verdugo Avenue reconfiguration. The format of the petition made it difficult to ascertain when and where signatures were collected, although dates on some of the petitions sheets are from June 2010, which was soon after initial project implementation. Staff has also received a number of general, policy criticisms from residents who question why the City should dedicate roadway space specifically to bicycles at the expense of vehicles. As stated in previous reports, the purpose of the Verdugo Avenue reconfiguration is to improve transportation access for a variety of modes as the component of a larger, non-motorized plan, as well as improve safety and calm vehicle traffic for adjoining land uses. A shown by the data collected on the street, these improvements have come at no cost to drivers in overall travel time, and only with a small cost in isolated delay at major intersections.

Staff has also received a number of positive comments on the reconfigured Verdugo Avenue. Comments have been supportive of expanding non-motorized travel, improving safety, reducing greenhouse gases, and calming traffic. There have also been comments supportive of the change from a vehicle access standpoint from users who feel that the vehicular operation on Verdugo has been improved as well. A compilation of email written comments, as well as a selection of news publications and comments regarding the project is attached as Exhibit B.

Accident Data

Staff also collected accident statistics for the Verdugo Avenue corridor to determine if the reconfiguration has lead to a change in accident rates. Accident data for vehicles as well as

bicycles/pedestrians was compiled for two years prior to the reconfiguration (March 2008 through February 2010) and seven months subsequent to the reconfiguration (March 2010 through September 2010). Staff observed a slight decrease in the rate of total accidents once the reconfiguration was implemented. Of those accidents, very few bicycle/pedestrian accidents were reported during either time period to make a meaningful comparison.

Table 4 - Verdugo Corridor Accidents

	Two Years Before Reconfiguration	Seven Months After Reconfiguration
Total Accidents	44	11
Accident Rate (per year)	22	19
Bicycle/Pedestrian Accidents Only*	4	2

* Bicycle/Pedestrian Accidents are included in Total Accidents above

Further Implementation Options

If Council directs staff to make the Verdugo Avenue reconfiguration permanent, staff recommends that some additional operational improvements be made to the corridor to further improve vehicle flow. In particular, staff recommends that an additional signal modification be made at the Hollywood Way / Verdugo Avenue intersection to help improve the synchronization of that intersection with the remainder of the corridor. Staff is also considering installing left turn arrows at Buena Vista Street that would be responsive to queue lengths at this location using advance loop detectors. This technology has been advocated by the Traffic Commission, and staff believes this could be a good location to install as a pilot project prior to implementing elsewhere. In addition, staff is considering minor striping adjustments near Burroughs High School to improve right turning traffic by making it more clear to drivers that turning vehicles may use the last 100 feet of the bike lane as a turn lane if no parked cars are present. Finally, if the reconfiguration is made permanent, staff would program a restriping of Verdugo Avenue to add bicycle lanes from Olive Avenue to Victory Boulevard. This would not require the removal of any travel lanes or parking as it would simply narrow the existing lanes slightly to accommodate the bicycle lanes. Staff would also review the feasibility of extending the bicycle lanes west to the western city limits. This would likely be coordinated with a planned traffic signal upgrade at Pass Avenue and Verdugo Avenue. Some of these improvements could be funded through an upcoming Caltrans grant program to improve roadway safety.

Alternatively, Council could decide that the increased bicycle and pedestrian service levels on Verdugo do not outweigh the intersection delay at Buena Vista Street and Hollywood Way, and that the street should be restored to its original configuration. In that case, staff would utilize the money previously budgeted by Council to restore the lanes to their original configuration. The traffic signal investments would still be effective to improving vehicle flow, but improvements to bicycle and pedestrian access would be lost. Also, Council would have to decide how to reconfigure the Hollywood Way intersection, as the installation of double left turn lanes are included on the City's long-range intersection improvement plans and would still create a single-lane bottleneck at this intersection. Council would have to decide to remove the double left turn

lanes (and install them at some point in the future per the City's long range plans), maintain the single-lane approach to Hollywood Way, or remove on-street parking. Also, as shown in the travel time surveys, restoring Verdugo Avenue would not appreciably affect travel times along the corridor, although it would marginally improve intersection delays at Buena Vista Street and, to a lesser extent, improve them at Hollywood Way as well.

City Council Goals

Implementing and maintaining the Verdugo Avenue reconfiguration is consistent with two of the Council's FY 2010/2011 Goals. The Verdugo Avenue reconfiguration furthers the Council's Sustainability Goal by reconfiguring one of the City's secondary arterial streets to better accommodate bicycles and pedestrians and improving non-motorized access to a number of destinations along the corridor while implementing a Top Priority Project of the City's Bicycle Master Plan. It improves the City's transportation sustainability while not conflicting with a second Council Goal to maintain and improve Infrastructure/Transportation, Traffic and Parking. The reconfiguration maintains travel time for vehicles, improves traffic signal coordination along the corridor, and only minimally impacts delay at the corridor's major intersections. While transportation sustainability and traffic circulation can sometimes be competing objectives, staff believes the Verdugo Avenue reconfiguration is able to meet both goals simultaneously while not unduly sacrificing one travel mode at the expense of another. The opportunity to vastly improve non-motorized travel without substantially impacting vehicle operations in an existing, built-out environment is not a common outcome in Transportation Planning.

FISCAL IMPACT:

Council previously budgeted $56,000 to implement the Verdugo Avenue reconfiguration and an additional $50,000 to restore the street if necessary[1]. To date, $52,300 has been spent to implement the striping and signal modifications to Verdugo Avenue. Thus, $53,700 is available in project account 370.PW21A.70002.0000.16969 Main Street & Clybourn Avenue Project (which includes the work on Verdugo Avenue). These funds could be used to reinstall the previous configuration while maintaining the traffic signal upgrades that are of benefit to vehicle traffic regardless of configuration. Alternatively, if Council decides to maintain the improvement, it could direct to un-appropriate these remaining funds for other City needs.

CONCLUSION:

Since the implementation of the Verdugo Avenue reconfiguration, staff has spent considerable effort collecting data and monitoring operations to improve the street for vehicle users while observing the non-motorized activity on the street. The data shows that the reduction in travel lanes and addition of a left turn lane has not appreciably had an effect on vehicle flow through the corridor. Travel times measured before and after the improvement was implemented show no change in travel time along the corridor for drivers. There has been some increased delay at the two major intersections at Buena Vista Street and Hollywood Way, but mid-corridor travel

[1] Of the total $106,000 budgeted for the Verdugo reconfiguration and its removal if deemed necessary, $25,000 was budgeted from 127.CD33A.70999.1134.00000 Holding-Construction in Progress, while $81,000 was budgeted from 370.PW21A.70002.0000.16969 Main Street & Clybourn Avenue Project (which was the project account used to resurface Verdugo Avenue).

times have actually decreased due to the timing of traffic signals to improve flow. Bicycle travel is significant as compared to the average Los Angeles area arterial street, and the corridor serves about 200 bicycles per day, or about 1.5 to 2 percent of total traffic. Qualitative observations of bicycle travelers show a surprisingly wide variety of cyclists using the street including families and children, which suggests that riders feel safe using the lanes. There has been a slight decrease in the number of total accidents along the corridor although the short timeline and low number of bicycle and pedestrian accidents makes a statistical analysis of non-motorized accidents difficult to conduct.

Criticism for the reconfiguration has decreased substantially since its initial implementation, although there is persistent complaint of difficulty in driving across Verdugo at unsignalized intersections and of continued congestion around Burroughs High School. A petition received in October 2010 was also unsupportive of the reconfiguration, but it was unclear if signatures were collected early in the project or recently. There have also been positive comments given to staff regarding the improvement to non-motorized and even vehicular travel. Given the high bicycle usage and the relatively minor effect on motorized traffic, staff believes that the Verdugo reconfiguration is operating exceptionally well in accommodating vehicular traffic and simultaneously providing safe, non-motorized access to residents and commuters in the corridor. Staff recommends that Council maintain the current reconfiguration and allow staff to continue to monitor the corridor as part of its ongoing intersection monitoring and data collection program. In addition, Council previously budgeted additional funds to restore Verdugo Avenue should they decide not to maintain the reconfiguration. Council could ask that these funds be un-appropriated from the budget, or could apply these budgeted funds to some other City need. Given the success of the Verdugo Avenue reconfiguration in serving bicycle traffic without affecting vehicle travel times along the corridor, staff believes that this improvement should be left in place and that the additional minor improvements be made to further enhance the street's operation.

RECOMMENDATION:

Staff recommends the City Council maintain the new configuration on Verdugo Avenue and direct staff to continue to monitor roadway and intersection performance as part of the City's ongoing intersection and traffic signal system monitoring.

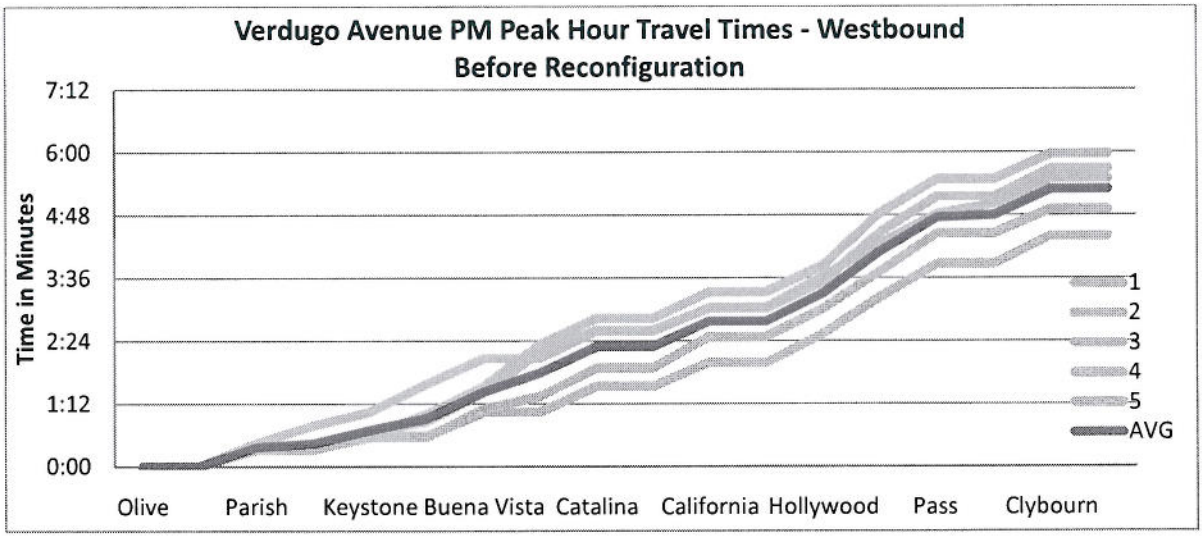
EXHIBITS:

Exhibit A: Detailed Travel Time Data for Verdugo Avenue

Exhibit B: Email Correspondence and Selected Newspaper Commentary on the Verdugo Avenue Reconfiguration

EXHIBIT A:

Detailed Travel Time Data for Verdugo Avenue


Verdugo Avenue PM Peak Hour Travel Times - Westbound
Before Reconfiguration
Time in Minutes
7:12
6:00
4:48
3:36
2:24
1:12
0:00
Olive
Parish
Keystone
Buena Vista
Catalina
California
Hollywood
Pass
Clybourn
1
2
3
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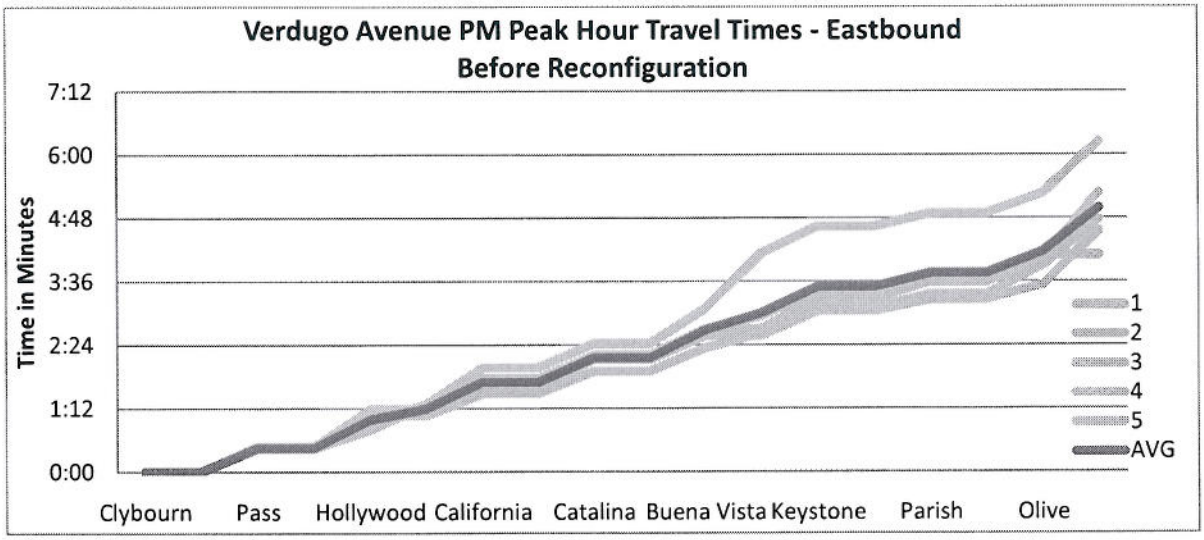
5
AVG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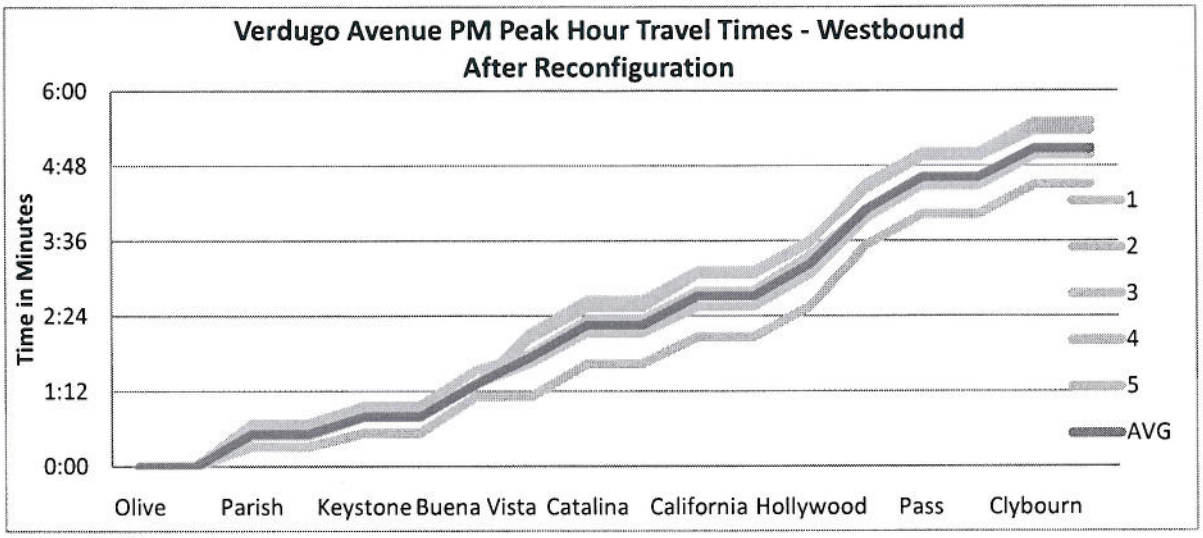
Time in Minutes
7:12
6:00
4:48
3:36
2:24
1:12
0:00
Clybourn
Pass
Hollywood
California
Catalina
Buena Vista
Keystone
Parish
Olive
1
2
3
4
5
AVG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Catalina
California
Hollywood
Pass
Clybourn
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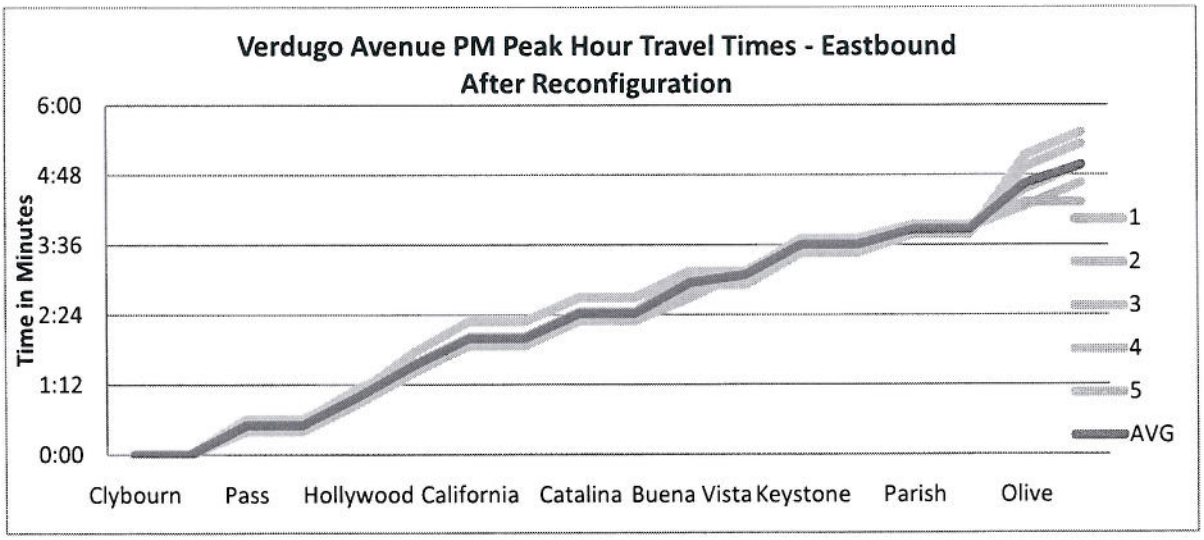
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TRAFFIC COMMISSION REPORT
October 28, 2010

Item VE

HIGHWAY SAFETY IMPROVEMENT PROGRAM GRANT

ISSUE:

Staff requests Traffic Commission endorsement to apply for two Highway Safety Improvement Program (HSIP) grants. One grant application will extend the Verdugo Avenue bike lanes to the east and to the west of the current project, and the second grant application will fund the installation of guardrail at a number of locations in Burbank

BACKGROUND:

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which was signed into law on August 10, 2005, established the Highway Safety Improvement Program (HSIP) as a core Federal-aid program. The overall purpose of this program is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads through the implementation of infrastructure-related highway safety improvements.

The specific provisions pertaining to the HSIP are defined in Section 1401 of SAFETEA-LU which amended Section 148 of Title 23, United States Code (23 USC 148) to incorporate these provisions. These provisions are still in effect due to Continuing Resolutions passed by Congress during Federal Fiscal Year 2009/10.

On September 3, 2010, Caltrans announced a call for HSIP projects based upon anticipated federal safety funding in the 2010/11 federal fiscal year (FFY). Caltrans expects the HSIP funding apportioned to local agencies to be approximately $50 million for the 2010/11 FFY. Applications are due to Caltrans by December 9, 2010.

Typically, grant have been given to communities to install in-pavement lighted crosswalks, install guardrail, install left turn traffic signals, widen shoulders, install medians, install roundabouts, and install curb extensions.

Burbank has successfully applied and received several grants totaling about $1.4 million over the last several years. One grant will help fund the rail/highway grade crossing improvements of Buena Vista Street at Vanowen Street, and the other grant will fund the installation of traffic signals at Burroughs High School on Verdugo Avenue. The proposed grant to extend the bicycle lanes on Verdugo Avenue will complement this past approved grant.

DISCUSSION:

Application #1: Verdugo Avenue Safety Improvement Project – The project will extend the existing Type II bicycle lanes on Verdugo Avenue to Victory Boulevard on the east and Pass Avenue on the west. It will also install bicycle detection at existing traffic signals, install curb extensions at several locations, and fund the widening of Verdugo Avenue by four feet between Olive Avenue and Virginia Street. A plan of the improvement is shown in Attachment 1. The completed project will connect to existing Type II bicycle lanes on Main Street, and it will extend the Verdugo Type II bicycle lanes to the western city limits. The estimated cost of the project is about $650,000, and the Federal HSIP program will fund 90 percent of the project. A cost breakdown of the project is as follows:

Project Element	Unit Cost	Total Cost
Verdugo Widening	$ 45.00/Ft	$ 45,000
Curb Extensions	$25,000/Ea	$150,000
Video Bicycle detection	$25,000/Location	$225,000
Conduit & pullboxes	$10,000/Signal	$ 50,000
Bike lanes	$20,000	$ 20,000
Subtotal		*$490,000*
Contingencies	15 %	$ 73,500
Design	15 %	$ 73,500
Grand Total		**$637,000**

The Traffic Commission has had concerns about curb extensions with previous grant applications. The concerns involved possible congestion issues related to turning traffic. Staff has investigated several alternatives to mitigate these concerns. The options are shown in Attachment 2. The first option is to install smaller extensions on all corners that would not impede the turning movements, and the second option is to install extensions only where they will not restrict turns from Verdugo Avenue.

Application #2: Installation of Guardrail – Guardrail is either deteriorated or not installed at 80 locations throughout Burbank. The existing deteriorated guardrail is not to current Caltrans standards. A breakdown of project costs is as follows

Project Element	Unit Cost	Total Cost
Construct guardrail	$100/LF	$500,000
Remove Guardrail	$10/ LF	$ 50,000
Subtotal		*$550,000*
Contingencies	10 %	$ 55,000
Design	5 %	$ 27,500
Grand Total		**$632,500**

CONCLUSIONS:

.
The above two projects are needed to improve safety in Burbank, and they are the type of projects that have been funded by Caltrans in past grant cycles. Staff believes that these projects have a good chance of receiving funding from Caltrans.

RECOMMENDATIONS:

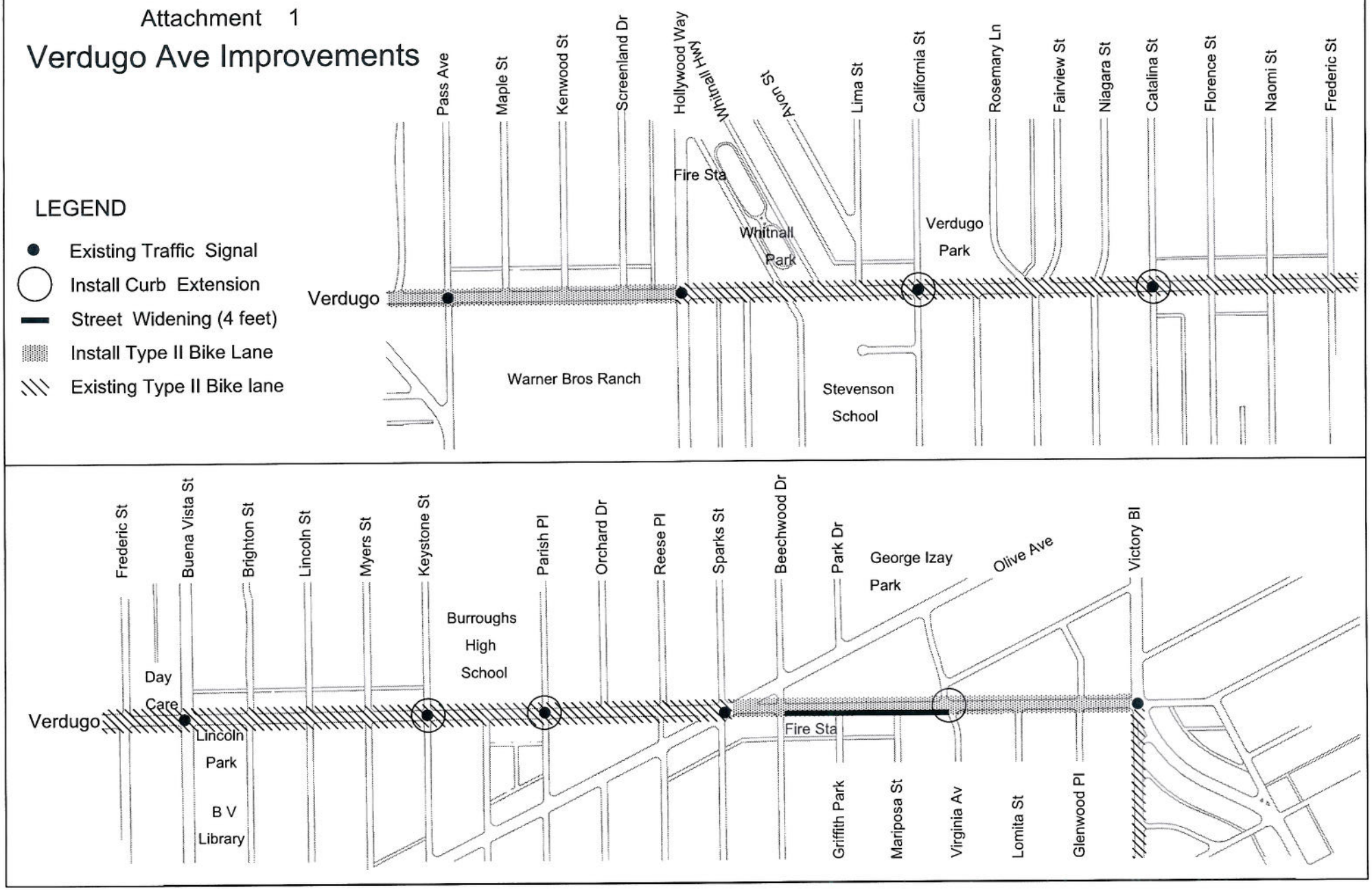
Staff requests Traffic Commission support for these two projects and requests endorsement letters from the Traffic Commission to Caltrans in support of the applications.

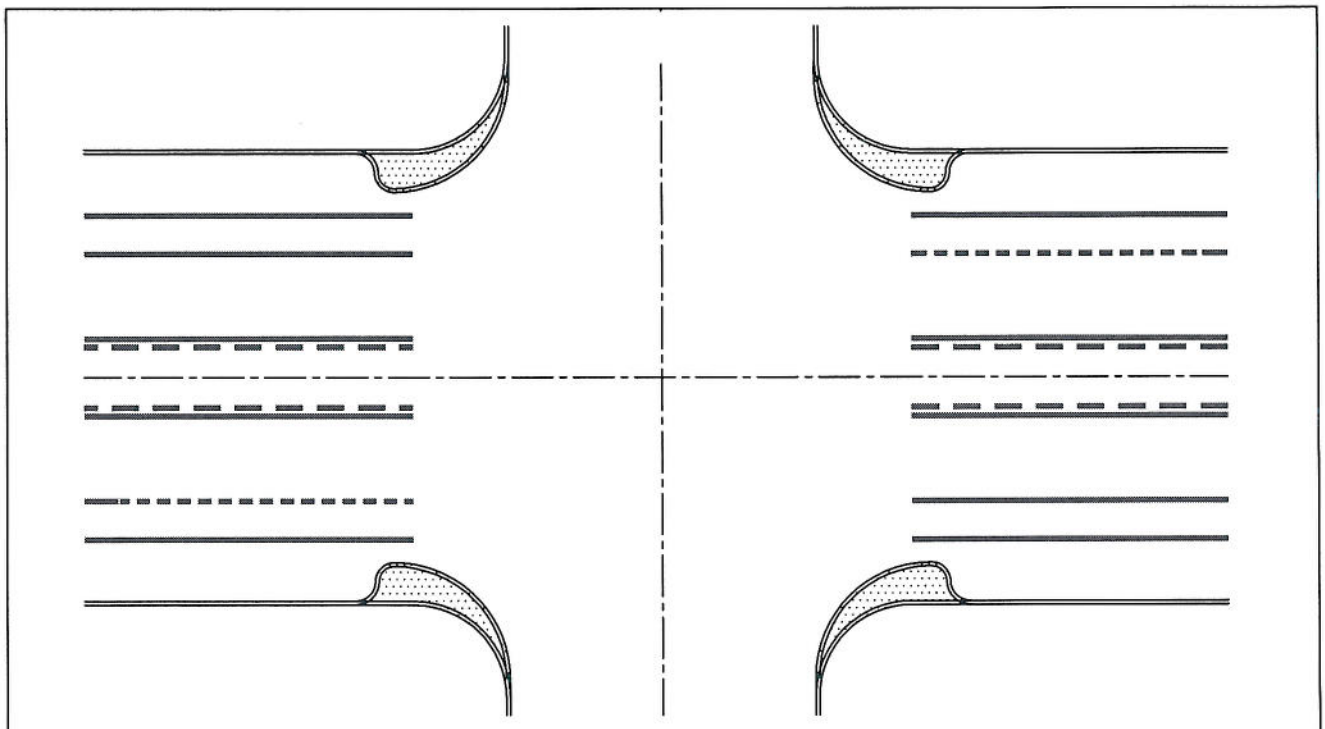
ATTACHMENTS:

1. Verdugo Avenue Safety Improvement Project
2. Optional Curb Extensions
3. Sample Endorsement letter

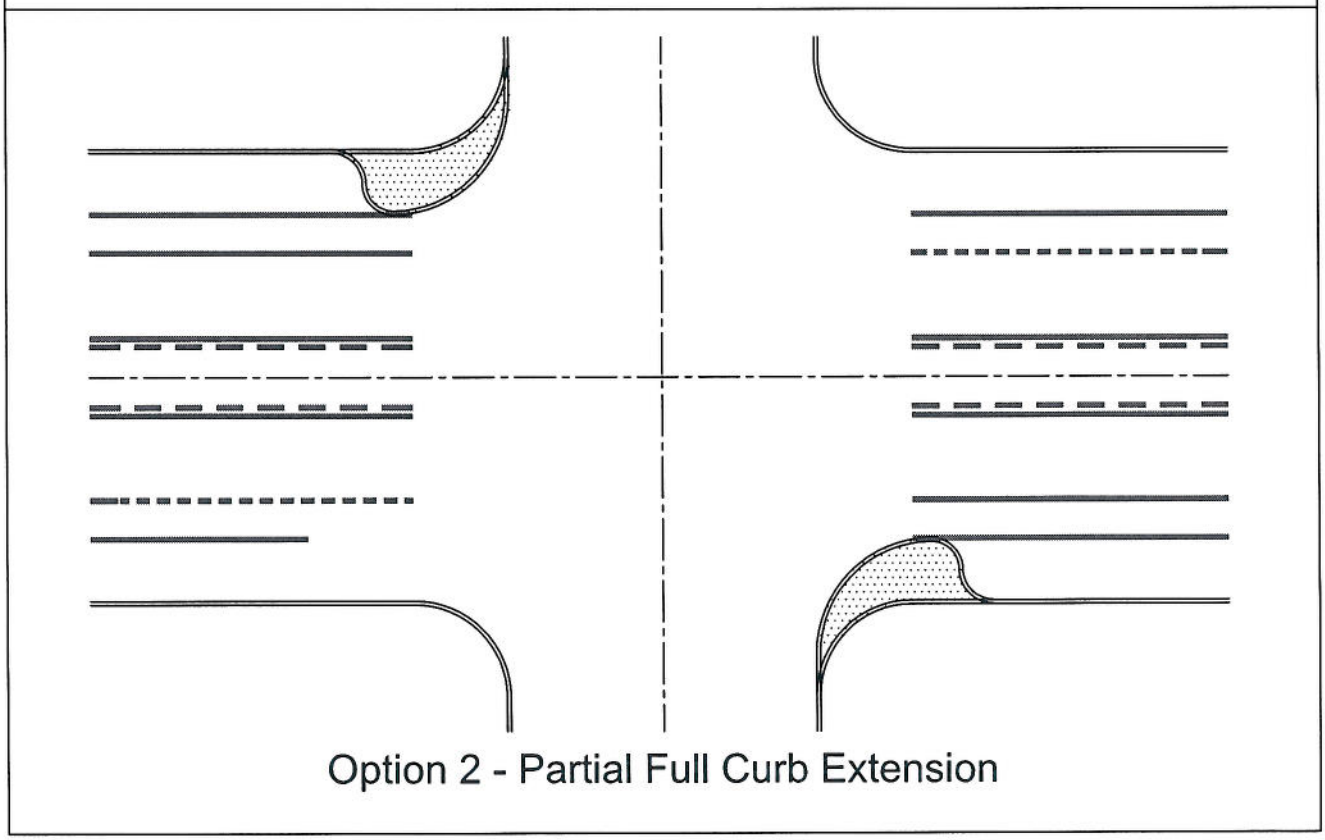
Attachment 1

Verdugo Ave Improvements





Option 1- Small Curb Extensions



Option 2 - Partial Full Curb Extension

Attachment 2

Curb Extension Alternatives on Verdugo Avenue

CITY OF BURBANK
275 EAST OLIVE AVENUE, P.O.BOX 6459, BURBANK, CALIFORNIA 91510-6459
www.ci.burbank.ca.us

PUBLIC WORKS
DEPARTMENT

October 20, 2010

Mr. Kenneth Johnson
City Traffic Engineer
City of Burbank
275 East Olive Avenue
Burbank, CA 91502

Subject: HSIP Grant Applications

Dear Mr. Johnson:

The Traffic Commission of the City of Burbank has reviewed the proposed twp applications to the State of California for Highway Safety Improvement Program (HSIP) grants. We fully endorse the proposal to extend the Verdugo Avenue Type II bicycle facility from its current limits to the western Burbank city limits and to Victory Boulevard. The extended on-street bicycle facility will significantly improve bicycle safety on the corridor.

We also recommend the application to replace old and unsafe guardrail throughout the city. The existing guardrail is substandard and many locations do not comply with current standards. This improvement will increase safety at many locations in Burbank.

Sincerely,

Brian Malone, Chairman
Burbank Traffic Commission